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38. DISTRIBUTIONAL NOTES ON *MARGARITARIA* L.F. (EUPHORBIACEAE) IN SOUTHERN INDIA AND SRI LANKA

Margaritaria L.f. is a relatively homogeneous genus of 14 closely related species (Webster 1979), spread all over the tropical world. It is characterized by dioecious habit, unspecialised branching pattern, tetramerous calyx, annular floral disc, papery endocarp and unique seeds (fleshy exotesta and thick, bony endotesta). It is allied to *Flueggea* (Dalzell 1852, Webster 1979) rather than to *Phyllanthus*. It differs from *Flueggea* in the lack of pistillode in the male flower and from *Phyllanthus* in having an annular disc substending the tetramerous androecium. Only two species of *Margaritaria* occur in India and Sri Lanka, namely *M. indica* (Dalz.) Airy-Shaw and *M. cyanosperma* (Gaertner) Airy-Shaw.

In earlier Indian Taxonomic Literature, *Margaritaria indica* has been included either under *ProSORUS* Dalz. (1852) or *Phyllanthus* L. s.l. The genus *Margaritaria* L.f. (Suppl. Pl. 66. 1781) was revived by Webster (1957) who also revised it later in 1979. An attempt has been made here to review the present situation and the status of this genus in Southern India and Sri Lanka.

As a result, the species which occurs in India (i.e. *M. indica*) was found to have a

wider distribution than what has been stated earlier (cf. Map 5 of Webster 1979). Some important collections of Thwaites (CP numbers) from Sri Lanka, including the *isotype* of *M. cyanosperma*, were located in MH, and what has been cited as *M. cyanosperma* (Thwaites CP 2155) by Webster (1979 :427) has been identified *M. indica*.

The two species of *Margaritaria*, which are found in Southern India and Sri Lanka, resemble each other in the glabrous nature of plant parts, leaf morphology, tricarpellary condition and in the rugose nature of endotesta (sclerotesta). However, they differ in the size of male flowers and in the number of female flowers per axil. Compared to *M. indica*, in fact in the whole genus (Webster 1979), the staminate flowers of *M. cyanosperma* are larger. Moreover, while 1-3 pistillate flowers occur in the axils of *M. indica*, they are solitary in *M. cyanosperma*.

1. *Margaritaria indica* (Dalz.) Airy-Shaw in Kew Bull. 20: 387. 1966, 25: 492. 1971, 26: 308. 1972 & 36: 330. 1981; Ramamoorthy in Saldanha & Nicolson, Fl. Hassan Dist. 345. 1976; Webster in J. Arnold Arb. 60: 425. 1979. *ProSORUS indicus* Dalz. in Hooker's J. Bot. &

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Kew Gard. Misc. 4: 346. 1852; Trimen, Hand. Fl. Ceylon 4: 27. 1898; Hook. f., Fl. Brit. India 5: 305. 1887; Gamble, Fl. Pres. Madras 2: 905. 1957 (repr. ed.). Type: India, Deccan, *Dalzell s.n.* (K, n.v.). *Phyllanthus indicus* (Dalz.) Muell.-Arg. in *Linnaea* 32: 52. 1863 et in DC. Prodr. 15(2): 417. 1866; Brandis, Ind. Trees 571. 1906; Airy-Shaw in Kew Bull. 16: 342. 1963. *P. stocksii* Muell.-Arg. in *Linnaea* 32: 151. 1863. Type: India, *Stocks & Law s.n.* (G, n.v.).

Specimens examined: INDIA. ANDHRA PRADESH: Chittoor Dist.: Mamandur (900 m): *G. V. Subbarao* 31953, 26-6-1969, ♀. A new record for the State. KARNATAKA: Coorg Dist.: Sampajee Ghat: *R. H. Beddome s.n.* MH. Acc. No. 46977, ♂. For additional citations see Ramamoorthy in Saldanha & Nicolson, Fl. Hassan Dist. 345. 1976 and Webster in J. Arnold Arb. 60: 426. 1979. KERALA: Idukki Dist: Mullakudy (850 m): *B. D. Sharma* 43862 14-3-1973, ♂; Malabar: *Stocks, Law L. C. s.n.*, ♂. ♀; Malabar (Wynaad): *R. H. Beddome s.n.* MH. Acc. No. 46976, ♂. ♀. TAMIL NADU: Coimbatore Dist.: Anamalais: *R. H. Beddome s.n.* Year 1866. ♂, ♀; Anamalais. Karianshola (762 m): *V. Narayanaswamy* 5365, 16-3-1931, ♂. Tirunelveli Dist.: Vasudevanallur R. F. (350 m): *E. Vajravelu* 38853, 3-10-1971, ♀. SRI LANKA. No precise locality: *Thwaites CP* 2155, ♂ & ♀.

Distribution: INDIA. Western Ghats: Coorg, Kanara, Hassan, Wynaad, Anamalais, Thekkady and Tirunelveli. Eastern Ghats: Mamandur (Andhra Pradesh) in the south (present study) and Mahendragiri hills (Orissa) in the north (*ex Haines*, 1961). SRI LANKA.

2. *M. cyanosperma* (Gaertner) Airy-Shaw in Kew Bull. 20: 387. 1966; Webster in J. Arnold Arb. 60: 427. 1979. *Croton? cyanospermus* Gaertner, Fruct. Semin. Pl. 2: 120.

pl. 107. 1791. *Prosorus gaertneri* Thwaites in Hooker's J. Bot. & Kew Gard. Misc. 8: 272. 1856. *P. cyanospermus* (Gaertner) Thwaites, Enum. Pl. Zeyl. 281. 1861; Hook. f., Fl. Brit. India 5: 305. 1887; Trimen, Hand. Fl. Ceylon 4: 27. 1898. *Phyllanthus cyanospermus* (Gaertner) Muell.-Arg. in *Linnaea* 32: 51. 1863 et in DC. Prodr. 15(2): 416. 1866. Neotype: Ceylon, *Thwaites CP* 2601 (PDA, holotype, n.v.; designated by Webster, *l.c.* since Gaertner's type was considered to be missing). *Cicca gaertneriana* Baillon, Etud. Gén. Euphorb. 619. 1858. *Zygosperrum zeylanicum* Thwaites ex Baillon, Etud. Gén. Euphorb. 620. *pl.* 27. *fig.* 11. 1858. Type: Ceylon. *Thwaites s.n.* (P, n.v.).

Specimens examined: SRI LANKA. Without any precise locality: *Thwaites CP* 2601, ♀, (Isotype); No. Collector's name or locality: MH. Acc. No. 61815, ♂, ♀.

Distribution: Endemic to Sri Lanka.

Note: Webster (1979: 427) cited *Thwaites CP* 2155 (A) under *M. cyanosperma*. But the specimen available in MH (also *Thwaites CP* 2155) was found to be *M. indica*. It is interesting to note here that *CP* 2155 (PDA) was quoted under *Prosorus indica* by Thwaites (1856: 272) himself.

All the specimen cited in this paper are available in MH unless stated otherwise.

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39. *MELOCHIA PYRAMIDATA* LINN. (STERCULIACEAE) —
A NEW RECORD FOR MAHARASHTRA

(With six text-figures)

Melochia pyramidata Linn. Sp. Pl. 674, 1753; Baker *et al.* in Flora of Java 1: 406 1963; M. T. Masters in Fl. Brit. India 1: 374, 1874; S. S. Veppulari, Indian Forester, 95(5): 311-3, 1969.

An erect, profusely branched herb, 0.5-1.0 meter tall, stem terete, woody at base. Leaves petiolate, stipulate, simple, alternate, ovate-lanceolate, 5.2-5.5 cm. long and 2.4-3.3 cm. broad, acute at the apex, obtuse at the base, crenate along margins, glabrous on both the surfaces. Veins 6-8, prominent on dorsal side, five veins given out from the base of the midrib. Petiole 2-2.5 cm. long, grooved on dorsal side, with curved hairs on all over the groove, rusty. Stipules free lateral, deltoid, 0.5-1.0 cm. long and 0.2-0.3 cm. broad at the base, hairy on both margins, deciduous. Inflorescence leaf-opposed, umbel-like cymes, 4-6 flowered, peduncle 1.2-1.5 cm. long, pubescent, with glandular hairs all over; glands brown in colour.

Flowers regular, bisexual, bracteate, purple in colour. Calyx 5-lobed, united at base, divided up to the middle, long-acuminate, green, glandular hairy. Corolla with 5 petals; purple, with yellow base. Stamens 5, opposite to the petals, adnate at the base; filaments 4-6 mm. long; anthers dorsifixed; pollen-grains spherical, smooth. Ovary superior, shortly stalked, oblong, hairy all over, 5-celled, syncarpous, with one ovule in each cell on axile placenta; style deeply 5-lobed, stout, hairy; stigma papillose. Fruit a capsule, broadly pyramidal, obtuse at base, longitudinally 5-winged; wings dilated towards base, 6-8 mm long, thin-walled, greenish-yellow, with red patches, stellately hairy, dehiscing longitudinally. Seeds dark-brown, roughly triangular.

Flowers: October-May.

This is an introduced Tropical American weed found in India, and recently located in Bombay in waste lands near Bandra and